# CITY OF BRANSON

# 2008 ANNUAL WATER QUALITY REPORT (Consumer Confidence Report)

MO5010096

We are pleased to present to you this year's Annual Water Quality Report. This report is intended to provide you with important information about your drinking water and the efforts made to make sure it is safe. This report is not being mailed to each individual water service customer, however, if you would like a copy please call the Consumer Confidence Hotline at 417-337-8565, or visit our website at bransonmo.gov and click on Public Works. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect your water resources. We are committed to ensuring the quality of your water.

#### Attention!

Este informe contiene informacion muy importante. Traduscalo o prequntele a alguien que lo entienda bien. [Translated: This report contains very important information. Translate or ask someone who understands this very well.]

#### What is the source of my water?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and ground water wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and in some cases, radioactive material, and can pickup substances resulting from the presence of animals or from human activity.

#### Our water comes from the following sources:

<u>Source Name</u>	<u>Type</u>		
Well #5	Ground Water		
Crosby Well	Ground Water		
Well #7	<b>Ground Water</b>		
Well #9	<b>Ground Water</b>		
Well #10	<b>Ground Water</b>		
Well #11	<b>Ground Water</b>		
Lake Taneycomo Intake 1	Surface Water		
Lake Taneycomo Intake 2	Surface Water		

#### Why are there contaminants in my water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Contaminants that may be present in source water include:

- A. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- B. Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
- C. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- D. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- E. Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Department of Natural Resources prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Department of Health regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

#### Is our water system meeting other rules that govern our operations?

The Missouri Department of Natural Resources regulates our water system and requires us to test our water on a regular basis to ensure its safety. Our system has been assigned an identification number MO5010096 for the purpose of tracking our test results. Last year, we tested for a variety of contaminants. The detectable results of these tests are on the following pages of this report.

#### How might I become actively involved?

If you would like to observe the decision making process that affects drinking water quality or if you have any further questions about your drinking water report, please call us at the City of Branson, Consumer Confidence Hotline (417-337-8565) to inquire about scheduled public meetings or contact persons.

#### Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

### WATER ANALYSIS REPORT

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As shown by the tables below, our water system had no MCL, monitoring, or treatment technique violations during the report period of January 1<sup>st</sup> through December 31<sup>st</sup> 2008. The water you are drinking meets and exceeds all Federal and State requirements. We have found through our monitoring and testing that some contaminants were detected, however all detected results are well within SAFE limits set by the Environmental Protection Agency.

#### Definitions:

MCLG: Maximum Contaminant Level Goal, or the level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

MCL: Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. The MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

90<sup>th</sup> percentile: For lead and Copper testing. 10% of test results are above this level and 90% are below this level.

Level Found: is the average of all test results for a particular contaminant.

Range of Detections: shows the lowest and highest levels found during the test period, if only one sample was taken, then this number equals the Level Found.

MRLDG: Maximum Residual Disinfectant Level Goal, or the level of a drinking water disinfectant below which there is no known or expected risk to health.

MRDL: Maximum Residual Disinfectant Level, or the highest level of a disinfectant allowed in drinking water.

#### Abbreviations:

PPB: Parts Per Billion or micrograms per liter.

PPM: Parts Per Million or milligrams per liter.

n/a: not applicable.

NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.

MFL: Million Fibers per liter, used to measure asbestos concentrations.

nd: Not detectable at testing limits.

The state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Records with a sample year more than one year old are still considered representative.

## **Regulated Contaminants**

DISINFECTION BY-PRODUCTS	Unit	MCL	MCLG	RAA	Range	Monitoring Period	
Total Haloacetic Acids (HAA5) Sources: By-product of drinking	ppb g water disi	60 nfection	0	32.59627	11.1 - 65	2008	
Total Trihalomethanes Sources: By-product of drinking	ppb g water chlo	80 orination	0	39.11486	25.2 - 58.1	2008	
CARBON (TOC)	Unit	MCL		Highest Value	Range	Collection Date	
Carbon, Total Organic (TOC) ppm 2.48 1.15 – 2.48 6/23/2008 Sources: Naturally present in the environment							
RADIONUCLIDES	Unit	MCL	MCLG	Highest Value	Range	Collection Date	
Gross Alpha Particle Activity, Total Sources: Erosion of natural dep	pCi/l osits			8.2	6.2 – 8.2	10/14/2008	
Radium, Combines (226, 228) Sources: Erosion of natural dep	pCi/l osits	5		1.7	1.4 – 1.7	1/22/2008	
Radium – 226	pCi/l	5	0	1.7	1.4 – 1.7	1/22/2008	
INORGANIC	Unit	MCL	MCLG	Highest Value	Range	Collection Date	
Barium Sources: Discharge of drilling w	ppm vaste; Disch	2 narge from 1	2 metal refine	0.0305 ries; Erosion of nat	0.0137 – 0.0305 tural deposits	3/31/2008	
Fluoride Sources: Natural deposits; Water	ppm r additive v	4 which prom	4 otes strong	1.2 teeth	0.79 – 1.2	3/31/2008	
Nitrate + Nitrite (as N) Sources: Runoff from fertilizer u	ppm se; Leachin	10 ag from sept	10 tic tanks, se	0.69 wage; Erosion of n	0.41 – 0.69 atural deposits.	9/15/2008	

Copper Typical Source: Corrosion of household plumbing systems							
	Units	Action Level	90 <sup>th</sup> Percentile	Sites exceeding AL	Rang	ge	
Date	ppm	1.3	0.136	0	0.0374	-0.302	
2005 – 2007	pp	1.3	0.130	v	0.0371	0.302	
Lead Typical Sources: Corrosion of household plumbing systems							
	Units	Action Level	90 <sup>th</sup> Percentile	Sites exceeding AL	R	ange	
Date							
	ppb	15	6	1	1.32	2 - 218	
2005 - 2007							
Microbiological	_	Result	MCL		MCLG	Typical Source	
COLIFORM, TOTAL	` /	n the month of July, 1 seturned as positive	Samples	s that collect Less Than 40 s per Month – No more than we monthly sample	0	Naturally present in the environment	

**Turbidity** is a measure of cloudiness in water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system.

Percentage of samples	Month occurred	Violation	Highest single	Month Occurred	Sources
in compliance with Std.			measurement for the year		
100	12	No	.23 NTU	December 2008	Soil Runoff

# OPTIONAL MONITORING (Not required by EPA)

	Highest Value	Range	Unit	Collection Date	MCL	MCLG
ALKALINITY, CACO3 STABILITY	351	128-351	MG/L	3/31/2008		
ALKALINITY, TOTAL	120	76-120	MG/L	3/28/2008		
BROMOCHLOROACE TIC ACID	2.75	2.75	UG/L	8/12/2008		
BROMOCHLOROACE ETIC ACID	2.27	2.27	UG/L	8/12/2008		
CALCIUM	76.5	35-76.5	MG/L	3/31/2008		
CHLORIDE	15.4	5.23-15.4	MG/L	3/31/2008	250	
HARDNESS, CARBONATE	370	113-370	MG/L	3/31/2008		
IRON	0.122	0.0199- 0.122	MG/L	3/31/2008	0.3	
MAGNESIUM	43.4	6.18- 43.4	MG/L	3/31/2008		
MANGANESE	0.00115	0.00115	MG/L	3/31/2008	0.05	
PH	7.72	7.29- 7.72	PH	3/31/2008		
POTASSIUM	2.3	1.21- 2.3	MG/L	3/31/2008		
SODIUM	6.12	1.29- 6.12	MG/L	3/31/2008	20	
SOLIDS, TOTAL DISSOLVED (TDS)	359	141- 359	MG/L	3/31/2008	500	
SULFATE	15.1	6.71- 15.1	MG/L	3/31/2008	250	
ZINC	0.0874	0.0103- 0.0874	MG/L	3/31/2008	5	

The reported results are based on all required monitoring throughout the entire water system. If you have questions about the water in your area please call us at 417-337-8565